



# Project Study Report – Project Development Support (PSR-PDS) Process and Preparation Procedures – Part Two

California Department of Transportation

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# Overview

- Obtain and Review Existing Reports, Studies Mapping or Other Information
- Review of the Project Site in the Field
- Identify Additional Data Requirements for Project Scoping
- Perform the Initial Engineering Analysis and Develop Alternatives
  - Environmental
  - Design
  - Structures



# PSR-PDS Preparation Process

- 1 •Work Programs for PSR-PDS Development
- 2 •Pre-PID Meeting  
Develop Charter and Cooperative Agreement, Framework for Purpose and Need and Concept and Scope, Design Criteria, Identify Deficiencies and Lead Agency
- 3 •Authorization for PID Preparation
- 4 •Obtain and Review Existing Reports, Studies, Mapping or Other Information
- 5 •Form the Project Development Team
- 6 •Develop Consensus on the Project Purpose and Need
- 7 •Review of the Project Site in the Field
- 8 •Identify Additional Data Requirements for Project Scoping
- 9 •Perform the Initial Engineering Analysis and Develop Alternatives
- 10 •Develop Cost Estimates
- 11 •Develop Schedules
- 12 •Risks
- 13 •Quality Management Plan
- 14 •Complete PSR-PDS
- 15 •Caltrans District Review and Approval

# Obtain and Review Existing Reports, Studies, Mapping or Other Information

- Essential to obtain the best available and most current maps and plans
  - Minimal field and office survey activities
    - Refer to Survey Needs Questionnaire (Chapter 5, Article 8, Appendix S of Project Development Procedures Manual (PDPM))
- Serves as basis for the conceptual design, development of alternatives, estimates, and exhibits

# Obtain and Review Existing Reports and Studies

- Information from existing data and relevant state, regional, and local transportation plans and studies is used by the project development team (PDT) to verify that the project is consistent with the planning level project purpose and need
- Refer to the Transportation Planning Scoping Information Sheet found in Appendix S, Chapter 5, Article 4, PDPM

# Review of Project Site in the Field

- Field reviews often identify project features that may otherwise go unnoticed
  - Field reviewers should focus on factors that contribute to the transportation problem
  - Access conditions for bicycles and pedestrians
    - Complete Streets (Deputy Directive 64-R1)

# Identify Additional Data Requirements for Project Scoping

- PDT should evaluate which deficiencies can be addressed given the:
  - Purpose and Need
  - Program definition
  - Funding constraints
- Identify facility deficiencies and concerns of stakeholders
- Identify data needs and issues to be considered or studied properly to scope the project
- Refer to Scoping Tools identified in Chapter 5, Appendix S, PDPM

# Identify Additional Data Requirements for Project Scoping

- PSR-PDS Scoping Tools (Appendix S – PDPM)
  - Article 2 - Project Initiation Document Design Scoping Index
  - Article 3 - Stormwater Documentation
  - Article 4 - Transportation Planning Scoping Information Sheet
  - Article 5 - Traffic Engineering Performance Assessment
  - Article 6 - Preliminary Environmental Analysis Report
  - Article 7 - Conceptual Cost Estimate Request - Right of Way
  - Article 8 - PSR-PDS Survey Needs Questionnaire
  - Article 9 - Quality Management Plan
  - Article 10 - Risk Register
  - Article 11 - Division of Engineering Services PSR-PDS Scoping Checklist

# Questions



# Perform the Initial Engineering Analysis and Develop Alternatives

## Environmental

- The Preliminary Environmental Analysis Report (PEAR) makes a critical contribution to the Project Initiation Document (PID) as it provides:
  - Initial environmental evaluation of a project
  - Feasible alternatives for programming in the State Transportation Improvement Program (STIP) or the State Highway Operation and Protection Program (SHOPP)
  - A best-estimate workplan that is the basis for requesting resources for the Project Approval and Environmental Document (PA&ED) phase

# What the PEAR is...

- A PEAR is:
  - Summary of specific, critical environmental issues and/or constraints that may affect project approval, programming, scheduling, design considerations, and cost.
  - Estimates the scope, schedule, and costs associated with the subsequent environmental compliance process and documents the assumptions and risks used to develop them.
  - Provides the environmental team preliminary information when beginning studies in the PA&ED or '0' phase and facilitates early consultation with state and federal resource agencies.

# What the PEAR is Not...

- A PEAR is not:
  - The PEAR is NOT an environmental document.
  - The PEAR is NOT the equivalent of a Tier 1 National Environmental Policy Act (NEPA) document.
  - The PEAR is NOT a report of environmental analysis.

# PSR-PDS

- The PSR-PDS facilitates programming of STIP projects by identifying ONLY the scope, schedule, and estimated support costs and resources necessary to advance the project through PA&ED.
- As the PSR-PDS only estimates costs through PA&ED, *the PEAR for a PSR-PDS should only estimate costs through PA&ED.*
- Environmental permits and commitment costs are a capital expense and should not be included in a PEAR for a PSR-PDS.

# Areas to Consider

- The PEAR should document all environmental issues that are anticipated to be addressed in the National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) documentation such as:
  - Air
  - Noise
  - Biological
  - Social
  - Cultural
  - Economic

# Conclusion

- The PEAR should be a concise report documenting the anticipated issues to be addressed in the NEPA or CEQA documentation and the assumptions that were used to anticipate those issues.
- The magnitude and complexity of the proposed project and the environmental sensitivity of the project area dictate the level of effort expended for the PEAR documentation.
- For further guidance, please see:  
<http://www.dot.ca.gov/ser/pear.htm>

# Questions



# Perform the Initial Engineering Analysis and Develop Alternatives

## Design

- Streamlined Project Initiation Document (PID) Requirements
  - Reduce time and resources needed to prepare PSR-PDS
- Purpose of Document
  1. Purpose and Need Consensus
  2. Establish Workplan for Project Approval and Environmental Document (PA&ED) phase

# Pre-PID Meeting



- Pre-PID Meeting
  1. Charter
  2. Purpose and Need
  3. Reimbursed Cooperative Agreement
  4. Attendees

# Quality Management

- Roles and Responsibilities
  - Deputy Directive 90 (DD90)
    1. Quality Control (QC) – Implementing Agency
    2. Quality Assurance (QA) – Implementing Agency and Project Sponsor
    3. Independent Quality Assurance (IQA)
      - California Department of Transportation

# Risk Management

- Risk Management
  - Existing Policy (PMD-003R)
  - Project Risk Management Handbook
    - <http://onramp.dot.ca.gov/hq/projmgmt/index.jsp?pg=65>
- Risk Management – Renewed Emphasis
  - A team has been meeting since January 2011
  - Project Delivery Notes -
    - [http://pd/documents/pd\\_notes/pdn\\_07\\_10-27-11.pdf](http://pd/documents/pd_notes/pdn_07_10-27-11.pdf)
  - Team preparing a Project Delivery Directive
  - Team is updating the Project Risk Management Handbook

# Design Scoping Index

- Design Scoping Index
  - Use during pre-PID meeting
  - Identify design criteria
  - Determine scope of work

# Conclusion



Appendix S  
Preparation Guidelines for Project Study Report-Project Development Support (PSR-PDS)  
Project Initiation Documents

## Appendix S – Preparation Guidelines For Project Study Report-Project Development Support Project Initiation Documents

### CHAPTER 1 – Introduction

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#### **Project Study Report-Project Development Support Project Initiation Documents**

The development of a Project Study Report-Project Development Support (PSR-PDS) Project Initiation Document (PID) provides a key opportunity for Caltrans and involved regional and local agencies to achieve consensus on the “purpose and need,” scope, and schedule of a project.

This appendix provides concepts and best practices for preparing a PSR-PDS for projects funded through the State Transportation Improvement Program (STIP), projects funded by others, and Long Lead State Highway Operations and Protection Program (SHOPP) projects. This appendix also provides a description of the information that should be contained in the PSR-PDS, and scoping tools needed to collect and organize information during the project initiation phase.

To appropriately apply the guidance described in this appendix, review the intent of policies and procedures in [Chapter 9](#) along with [Appendix L](#) of this manual. The PSR-PDS is only one type of PID. While this appendix provides guidance on preparing a PSR-PDS, [Chapter 9](#) and [Appendix L](#) provide the foundation for the understanding and knowledge necessary to develop any PID.

#### **Purpose for Project Study Report-Project Development Support (PSR-PDS) PID**

The purpose for using the PSR-PDS document is to gain approval for the project to move into the Project Approval and Environmental Document (PA&ED) phase.

The PSR-PDS is used to estimate and program the support costs necessary to complete the studies and work needed during PA&ED. The PSR-PDS does not provide conceptual approval as defined in [Chapter 9](#). If conceptual approval is required, the project sponsor should consider using the Project Study Report (PSR) format as defined in [Appendix L](#) instead of the PSR-PDS format. The Project Development Team (PDT) should discuss the appropriate format to achieve project sponsor goals during the pre-PID meeting. If appropriate, a local agency may submit a request to the Caltrans District Director for approval to use the Project Study Report (PSR) in lieu of the PSR-PDS.

At this level of the project, the required information is reduced with much of the detail being completed during PA&ED. Because of the reduction in level of effort, specific work must be completed and is listed in this document (e.g. Pre-PID meeting, Risk Assessments and Commitment).

# Questions



# Perform the Initial Engineering Analysis and Develop Alternatives

## Division of Engineering Services (DES)

- DES provides consultation services and structure cost ranges to ensure viable alternatives are developed for PSR-PDS projects
- Geotechnical Services and Structure Design are the primary functional units providing these services
- Program/Project & Resource Management provides the DES Service Agreement documenting services and resources for PSR-PDS projects

# Perform the Initial Engineering Analysis and Develop Alternatives

## Division of Engineering Services

- The DES Project Liaison Engineer (PLE) assists the District Project Manager and/or the District Design Engineer with completion of the DES PSR-PDS Scoping Checklist
- The PSR-PDS Scoping Checklist clarifies the services/products needed for our District partners
- For the PSR-PDS, the level of detail in the DES Scoping Checklist and “Structure PSR-PDS Cost Estimate “ is limited to information required to develop accurate work plans for the Project Approval and Environmental Document (PA&ED) phase
  - Refer to PDPM, Appendix S, Chapter 5, Article 11

# Perform the Initial Engineering Analysis and Develop Alternatives

## Division of Engineering Services

- DES Liaison Engineers
- Structure Design Technical Liaison Engineers (TLE) use a streamlined estimating process (e.g. square footage costs) to develop the Structure PSR-PDS Cost Estimate when bridge and/or non-standard retaining wall work is necessary
- Geotechnical Liaison Engineers provide consultation services to District Design and Structure Design, for roadway and structure alternatives.
- The PLE provides the Project Manager with the DES Service Agreement, listing required DES functional units, and estimated resource hours to be input into the workplan.

# Perform the Initial Engineering Analysis and Develop Alternatives

## Division of Engineering Services

### *Tips for our District Partners*

- District should contact the PLE as early as possible to get DES functional units involved with viable alternative development
- Include the DES Structure Liaison Engineer, Geotechnical Liaison Engineer, and the Project Liaison Engineer to be part of the Project Development Team

# Questions



# Resources

- Project Development Procedures Manual
  - <http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm>
- Office of Projects Plan Coordination
  - <http://www.dot.ca.gov/hq/tpp/offices/oppc/index.html>

# PSR-PDS Training Schedule



Session	Chapter	Topic	Nov 2011	Dec 2011	Jan 2012
One	One	Introduction	10		
Two	Two	<b>PSR-PDS Process and Preparation Procedures</b> Develop Work Programs, Authorization for PID Preparation, Pre-PID Meeting, Form the PDT, Develop Consensus on the Project Purpose and Need	17		
Three	Two	Obtain and Review Existing Reports..., Review of the Project Site in the Field, Identify Additional Data Requirements for Project Scoping Perform the Initial Engineering Analysis and Develop Alternatives - Environmental, Design, Structures		8	
Four	Two	Perform the Initial Engineering Analysis and Develop Alternatives - Traffic Engineering Performance Assessment, Stormwater, Right of Way, Local and Regional Input		15	
Five	Two	Develop Cost Estimates, Develop Schedules, Risk, Quality Management Plan and Independent Quality Assurance			5
Six	Two	Complete PSR-PDS, Caltrans District Review and Approval			12
	Three	<b>Outline for PSR-PDS</b>			
	Four	<b>PSR-PDS Estimates</b>			
	Five	<b>Scoping Tools</b>			
	Six	<b>PSR-PDS Templates</b>			